

Title (en)

METHOD FOR MANUFACTURING JOINED STRUCTURE OF DISSIMILAR MATERIALS, AND JOINED STRUCTURE OF DISSIMILAR MATERIALS

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER VERBUNDENEN STRUKTUR AUS UNTERSCHIEDLICHEN MATERIALIEN UND VERBUNDENE STRUKTUR AUS UNTERSCHIEDLICHEN MATERIALIEN

Title (fr)

PROCÉDÉ DE FABRICATION DE STRUCTURE ASSEMBLÉE CONSTITUÉE DE MATÉRIAUX DISSEMBLABLES, ET STRUCTURE ASSEMBLÉE CONSTITUÉE DE MATÉRIAUX DISSEMBLABLES

Publication

EP 3808494 A4 20210908 (EN)

Application

EP 19838561 A 20190711

Priority

- JP 2018136128 A 20180719
- JP 2018136513 A 20180720
- JP 2019027457 W 20190711

Abstract (en)

[origin: EP3808494A1] Provided is a method for manufacturing a joined structure (10) of dissimilar materials in which, in the joining of dissimilar materials, that is, an aluminum or aluminum alloy material (2) and a steel material (3), welding from the steel material side by a process of working from one side can be carried out, and an excellent welded joint can be obtained. Also provided is a joined structure of dissimilar materials. The present invention pertains to a method for manufacturing a joined structure (10) of dissimilar materials having: a step for forming a low-temperature spray coating (1) on at least a portion of a surface of an aluminum or aluminum alloy material (2) by low-temperature thermal spraying of at least one type of metal powder selected from ferritic stainless steel, austenitic stainless steel, and a two-phase stainless steel of ferrite and austenite; a step for overlapping the aluminum or aluminum alloy material (2) and the steel material (3) such that the low-temperature spray coating (1) and the steel material (3) face one another; and a step in which the low-temperature spray coating (1) and the steel material (3) are joined by laser welding from the steel material side.

IPC 8 full level

B23K 26/323 (2014.01); **B23K 26/21** (2014.01); **B23K 26/244** (2014.01); **B23K 26/322** (2014.01); **C23C 24/04** (2006.01); **B23K 103/20** (2006.01)

CPC (source: EP US)

B23K 26/244 (2015.10 - EP); **B23K 26/322** (2013.01 - EP); **B23K 26/323** (2013.01 - EP US); **B32B 15/012** (2013.01 - US);
C23C 24/08 (2013.01 - EP US); **C23C 24/085** (2013.01 - EP); **C23C 24/087** (2013.01 - EP); **F16B 5/08** (2013.01 - US);
B23K 2103/20 (2018.08 - EP)

Citation (search report)

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- See also references of WO 2020017420A1

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EP3915706A4

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3808494 A1 20210421; EP 3808494 A4 20210908; CN 112469529 A 20210309; CN 112469529 B 20230418; US 2021291298 A1 20210923;
WO 2020017420 A1 20200123

DOCDB simple family (application)

EP 19838561 A 20190711; CN 201980046442 A 20190711; JP 2019027457 W 20190711; US 201917257758 A 20190711